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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

12/23/2003

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EXAMINER

KENNY, STEPHEN

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 12/23/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,409

Applicant(s)

PERSSON, LARS

Examiner

Stephen J Kenny

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,11 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,11 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/7/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 4, 11, & 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, lines 6-9 it is unclear as to what the difference or distinction is between the first & second mold patterns since both are claimed to represent the same structure (i.e. first & second mould halves). Furthermore, independent claim 1 is incomplete since there is no injection mould formed as a result of performing the claimed steps in the method for making the mould. Moreover, it is unclear as to the exact functions of the “loading” step in the process of making the mould.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

In light of the U.S.C. 112 rejection discussed above, as best understood by the examiner - Claims 1, 3, 4, & 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltuz et al. (US Patent No 5595771) in view of Boros et al. (US Patent No 4795125).

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Regarding claim 1, Foltuz discloses a method for making injection molds comprising: defining function holes & recesses (14) while simultaneously defining a product cavity and parting plane of the mold (12) (column 5, lines 3-7). Note it is inherent that a product pattern be received in order for the location and sizes of the holes, recesses, and cavities to be defined.

Regarding claims 3, Foltuz discloses defining a coordinate system of the product pattern prior to the step of defining said holes, recesses, cavity, and parting plane (this is an inherent feature of Foltuz since the coordinate system needs to be defined prior to defining said holes & recesses otherwise the layered plates (16, 18, 19, 20, 34, 36, 38, 40, 39B) would not be able to communicate); wherein said coordinate system is defined such that the origin is available within a two-dimensional projection of the product pattern (any of the projections 26, 24, 30, which have two-dimensions, and are dictated by the product pattern could be considered the origin).

Regarding claims 4, & 14, Foltuz discloses generating data (or locating) function holes & recesses from the first mold pattern (12), as well as generating data regarding product cavity and parting plane from the second mold pattern (14); and machining a blank for the injection mold by each set of data independently from one another (column 5, lines 59-67 & column 6, lines 54-59 & column 7, lines 13-39). Mold insert 55e, which is mold shaping (or “machining”) insert, is fitted to the second mold pattern 14 irrespective of the first mold pattern 12. That is to say, that the mold insert 55e is held in place on the ejector side and does not communicate or engage with the first mold pattern 12 (column 6, lines 4-7). Conversely item 55f is fixed to the first mold pattern 12 irrespective of the second mold pattern 14.

Foltuz does not disclose the method for making an injection mold in a computer-based system comprising digital information.

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Boros discloses an injection mold assembly for a computer-based system (column 3, line 45 in that the process is “programmed”) which inherently comprises digital information. The use of a computer program for manufacturing an injection mold is advantageous in that it allows for cost effective mass production. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to form an injection mold as disclosed by Foltuz with a computer program as taught by Boros, in order to realize the advantages discussed above.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foltuz.

Regarding claims 11, Foltuz discloses the instant invention except for explicitly stating that the modular injection mold method is used to mold mobile phone compartments. It would have been an obvious matter of design choice to form cell phone components by Foltuz’s method, since it is widely known that cell phone components are routinely formed by injection molding. Furthermore, it is readily apparent that the method disclosed by Foltuz could be employed to mold cell phone components. Employing Foltuz’s method would afford the time and cost savings disclosed by Foltuz to the manufacturing of cell phone components.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J Kenny whose telephone number is 703-306-0359. The examiner can normally be reached on mon - fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

sk SK
12/17/03



DAVID P. BRYANT
PRIMARY EXAMINER